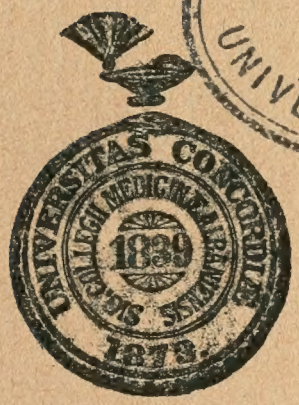
Vol. XL No. 2

ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the
Albany Medical College

FEBRUARY, 1919



Ασφαλὲς καὶ ἔμπεδον ἔστω το σὸν ἦδος. Ἐκ σκότου μὲν ἔξαγε φάος, ἐκ δὲ πάθους ἀναψυχήν.

ALBANY MEDICAL ANNALS

Journal of the Alumni Association of the Albany Medical College

EDITED BY
J. MONTGOMERY MOSHER, M. D.

Published on the First of every month
Subscription Price, Two dollars per annum in advance
Advertising Rates given on Application

Address all communications to ALBANY MEDICAL ANNALS,
Albany Medical College, Albany, N. Y.
Entered as Second Class matter at the Post Office, Albany, N. Y.

Acoeptance for mailing at special rate of postage provided for in section 1103, act of October 3, 1917, authorized July 31, 1918

Vol. XL, No. 2 — February, 1919

CONTENTS

Publisher's Department

THE CARE OF THE NEW BORN INFANT.—The conservation of infant life is one of the chief problems confronting the American people. Recognition of this has emphasized the great need of proper care of the infant at birth. The eyes, the umbilical cord, the mouth, nose and ears, and the skin of the new-born babe all require painstaking attention, or conditions are sure to arise that not only may lead to the most serious consequences, but may even jeopardize the baby's life.

As a practical aid to the proper care of the new-born infant the Johnson First Dressing Packet for Infants has met the hearty approval of the medical profession. Simple and compact, each Packet contains everything necessary for the proper dressing of the cord, the cleansing and disinfecting of the eyes, mouth, etc., and safeguarding the baby against infection. The practical utility of these First Dressing Packets has appealed to the physician who does obstetrical work, for better than anyone else he realizes how much their widespread use means in "starting the baby right." Inexpensive in price and put up in a way that insures their freedom from contamination, one or more of these Packets should be recommended by medical men to every expectant mother as an essential detail of her equipment. They are obtainable of all druggists or physicians supply houses.

Publisher's Department

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THE SEQUELAE OF LA GRIPPE.—Among all of the various acute and exhausting illnesses that afflict mankind, there is none that so generally results in distinct prostration as epidemic influenza, or La Grippe. Even the grippal infections which are uncomplicated or unaccompanied by serious organic changes are more than apt to leave the patient in a thoroughly devitalized condition after the acute febrile symptoms have subsided. It is for this reason that the treatment of La Grippe convalescence is of special importance. The anemic, debilitated, depressed patient requires a systemic "booster" that will not only stimulate but revivify and reconstruct. It is distinctly wise, in such cases, to commence vigorous tonic treatment as early as possible, preferably by means of Pepto-Mangan (Gude), the hemic builder and general reconstituent. This standard hematinic increases the vital elements of the circulating blood and, by increasing the appetite and improving the absorptive and assimilative functions, quickly restores both hemic and general vitality.

VOL. XL FEBRUARY, 1919 No. 2

ALBANY MEDICAL ANNALS

Original Communications

THE CARE OF THE FLYER.

BY WILLIAM E. GAZELEY, M. D

When the problem concerning the cause of the physical ailments peculiar to aviators arose it was at once apparant that the research study of "Mountain Sickness" carried on at Pike's Peak and other mountains would be of the greatest value. Here aviation men spent much time at a given altitude and acclimatization resulted. The aviator ascends to greater altitudes, remaining there but a short time and rapidly descends, so that the compensatory adjustments of the body must afford a temporary maintenance of efficiency in an atmosphere wholly unsuited to it. The pilot who spends but a small part of the day in the air is adjusted only to the level at which he lives. This is shown by the failure to find in any case permanent adaptive changes such as an increase in the percentage of haemoglobin and the number of red blood corpuscles.

Since there is no acclimatization each ascent requires effort on the part of the body, especially of the circulatory system. The frequent repetition of this eventually leads, with a varying degree of rapidity, according to the individual strength, to a condition which has become to be known as air staleness, from its similarity to the overtraining or staleness observed in ath-

letics. All things being equal it would be reasonable to suppose that the aviator could make his highest flight the first time and that each succeeding ascent would with the same margin of safety be lower.

It is readily seen that air staleness must be religiously guarded against, since, unlike athletic staleness, it is the indirect and frequently the direct cause of the death of the aviator: indirect, when in combat his control of the ship is less sure in manoeuvering for a position in the sun or a higher level to gain an advantage over his foe, or he is seized with a strong desire, as frequently occurs, to rush his opponent and "get the thing over with as quickly as possible;" direct, when, as a result of long strain, he faints either at high altitudes or in landing after a rapid descent from great heights, as the result of meeting an abundant oxygen supply after a period of great oxygen deficiency, such as seen in miners coming out of "after damp" and in the older types of submarines on opening the hatches after a submersion.

We do not see fainting as a result of physical exertion as a rule for, long before this, the collection of lactic acid and other waste products in the tissues give warning by a sense of fatigue which leads the individual to rest. The effort in aviation is a circulatory one and no warning is given. Efficiency is maintained until there is a circulatory break and unconsciousness intervenes with the inevitable crash and usual fatality.

The Medical Research Laboratory has endeavored to prevent this mortality by (1) the early classification of men into groups according to their physical condition, as revealed by the rebreathing test so that they will only fly at levels well below their margin of safety; and (2) by the early recognition and treatment of air staleness.

It has been determined that approximately 26,000 feet is the limit at which life can be maintained. Each individual however has his own particular level and could not live above that. The approximate determination of this by the rebreathing test serves as a basis for his classification. As the Henderson

rebreather has been amply described I will only mention that it consists of a tank which is connected to a mouthpiece by inch tubing with light automatic valves. A clip is placed on the nose and the subject inhales air direct from the tank through the inspiratory valve and exhales through the expiratory valve back into the tank through a cartridge containing an absorbent for carbon dioxide. A spirometer compensates for changes in volume and writes a record of the respiratory response on a revolving kymograph. As the aviator rebreathes he gradually reduces the oxygen content to a point where, if the rebreather is not removed, unconsciousness would occur. The pulse and blood pressure are taken at frequent intervals and give a warning of an impending circulatory break. During the test the subject operates several electrical instruments which serve as a basis to judge his mental efficiency throughout and also enable the examiner to recognize the effect of oxygen want on the brain centers.

The "Optimum" type will show as the oxygen is absorbed an increase in depth of respiration, so increasing the ventilation of the lungs. There will be a gradual rise in systolic blood pressure and pulse rate. Inefficiency will result from the effect on the brain and will precede a circulatory break.

The second class will show a more violent blood pressure response. The heart overworks throughout, terminating with a falling diastolic and sometimes systolic and fainting would occur if the apparatus is not removed.

The poorest type gives no response; the blood pressure and pulse show no effort at compensation and inefficiency occurs at a relatively low altitude.

The increase in depth and frequency of respiration is the first compensating factor to appear as sea level is left behind. But the extent of the value of this is soon reached and other factors appear.

It is apparent that if a small amount of well oxygenated blood will sufficiently nourish the tissues, the same needs will be provided for by a greater amount of less oxygenated blood.

Such an increase may result from (1) an increased output per beat, and (2) an increase in the number of beats, or (3) both. Either of these would tend to give an increase in the blood pressure which could embarrass a heart already under strain and lead to an earlier failure. The dilatation of the vessels in response to cerebral stimulation of the vaso-dilator nerves counterbalances this. This interplay in the optimum type occurs so smoothly that no evidence is given of it. The continued decrease in oxygen leads at length to severe embarrassment of the heart muscle with dilatation and death if not relieved.

It is probable that the interplay of the vaso-motor system is first affected by arterio-sclerosis and staleness. High blood pressure occurs in both. As there is evidence that some vessel changes are present as early as thirty it is readily appreciated that youth is essential in aviation. In a series of cases the early twenties showed the largest number of optimum types.

During the rebreathing test sinus arrhythmia is frequently accentuated but has not appeared to alter the run in any degree. Extra systoles when previously present increase during the latter part of the run to great frequency, often occuring every third or fourth beat. Many functional murmurs disappear during the run while organic murmurs increase in intensity.

The summary of the response of the different organs determines the classification of that man; which classification is as follows:

AA—Pursuit pilot, especially resistant to the effect of high altitudes;

A—No restrictions;

B—Should not fly above 15,000 feet;

C—Should not fly above 8,000 feet.

This determines whether the aviator will pilot a pursuit plane a bombing plane or an observation plane.

With each flyer in his proper status the period at which he will become stale is deferred. But close scrutiny must be maintained to detect the early appearance of staleness and measures taken to restore his physical integrity.

Air staleness first manifests itself in changes in the disposition and routine life of the individual. Where once he was

eager to fly at every opportunity he now becomes indifferent, later hangs back and begins to dread going up, but once up he enjoys flying and thinks that he is as skilled and accurate as ever. But he goes into tail spins for unknown reasons and wonders at it; or he has what is called a "series of wind-ups" which merely means a succession of poor landings. In tail spins and other stunts he shows frequently no desire to right the ship and remarks latter what an odd feeling he had had and how he did not seem to care if the ship crashed or not. Usually the complaint of feeling tired all the time is made, or, quite the opposite of a nervous uneasiness and insomnia. The appetite becomes impaired and more rarely nausea and vomiting occur on reaching the ground after a lengthy flight. If such a pilot is examined on the rebreather at this time, his record would be far inferior to his previous one. Severe colds, infections and dissipations all markedly influence a run on the rebreather. Such men are grounded and either given a vacation or put through a course of physical exercises under the care of the physical director, until fit to fly.

The rebreather is a test of the endurance or reserve strength of the circulatory system. It is a functional heart test. In the primary test the men are run only when feeling at their best, for the ability to perform work is a matter of reserve force and there is no doubt this varies from day to day. A cold, a gasro-intestinal disturbance or loss of sleep will influence it.

Reserve force is increased by judicious exercise as is witnessed in the training of men and is decreased by lack of exercise as is well known by those leading sedentary lives.

The aviator then, to be at his best, must be kept in training, in condition, such as is found in a professional baseball team. Here it is much more decisive than that a man is as old as his arteries but his very life depends on the stability and integrity of his circulatory system.

Clinical and Pathological Notes

Bilateral Trauma of the Cortical Leg Centers. By HAROLD N. MOYER, M. D.

A simultaneous injury of the cortical leg centers is of sufficient rarity to justify a report. The accident occurred to a laboring man, strong, and well muscled, 30 years of age. He had always had excellent health and prior to the accident in question had never sustained any serious injury. In the early morning of May 17, 1917, while employed near a pile driver he was struck by a heavy piece of iron weighing about 50 pounds which had fallen a distance of nearly 70 feet. It struck him transversely across the back part of the head, approximately over the posterior portion of the parietal bones. He fell, unconscious. About three hours later he had a slight return of consciousness just as he was being prepared for operation. A portion of the depressed bone was elevated. The brain under the depressed area was not pulsating. Within a few hours after the operation the patient regained his senses and did not lose them again. There was some wandering for a few nights after the operation.

As soon as a fairly complete examination could be made it was ascertained that he had complete paralysis of both legs. At no time was there involvement of the bladder or rectum. At the end of a month there was slight voluntary motion in the left knee and from this on there was a slow improvement until at the end of three months he was able to sit up in a chair. A couple of months later he was so far improved he was able to get about on crutches. Since then there has been practically no gain in locomotion. He can walk two or three blocks but his gait is slow and spastic. He can take a few steps without supporting his weight with crutches.

His present condition is that of a spastic paralysis of both lower extremities, the limitation and weakness being most marked in the right leg. This corresponds to the more extensive involvement of the left motor area, the injury of the skull having been deeper and somewhat farther out on the left side. He walks with a quite characteristic "hemiplegic" gait; that is, there is a tendency to turn the toe inward, most marked in the

right leg. When the foot is brought to the floor there is a slight uncertainty due to an occasional clonus, the heel coming to the floor with a little difficulty. The toes of both feet turn inward, the right the most. There is well marked ankle clonus in both feet which persists indefinitely and has a rate of about 250 jerks per minute. The Babinski sign was not present.

In the right leg there is a loss of feeling up to about the middle of the calf. There is no well marked line of demarcation between this and the area of normal skin perception, but approximately the defect is at right angles around the long axis of the limb. It amounts to only a failure to perceive slight contacts with the skin. Pressure, pain and temperature sense over this area is intact. One is not quite sure that the tactile sense is perfect in the left leg, but it is certainly most impaired in the right.

Other than this spastic paraplegia the man presents no symptoms. He is free from headache; has no dizziness, and his station is not impaired. The eye grounds and pupillary reactions are normal. None of the special senses is altered. He has no headache and is free from any mental disturbance.

The upper extremities are well developed, presenting no changes in sensation or motility. The cremaster and abdominal reflexes are intact.

It is to be regretted that a more accurate localization was not made at the time when the brain was exposed at the operation, but perhaps this would have been impractical. In any event, the injury was sufficiently severe to compromise the motor leg center on each side of the brain. It did not reach as far as the arm centers and apparently on one side only went far enough forward to get the cutaneous distribution of the right leg.

Correspondence

PASTEUR, DOCTOR OF MEDICINE.

36 Eagle Street, Albany,

January 5, 1919.

Dear Mont.:

My friend, Dr. Callamand, of St. Mandé, France, has lately sent me some articles written by him. His last letter contains what translates into the following: "I am sending you an article on *Pasteur, Doctor of Medicine*, which deals with realities and which you may translate for Albany's medical periodical."

Culver.

It has been said, with truth, that Pasteur was not a Doctor of Medicine. He was, in fact, something much better than that: he was medicine itself, the experimental pothogenesis which begets and conditions rational therapeutics.

But he was really, for a time, an M. D. In 1868, at the age of 46 years, he received the diploma from the Herren Professoren of the University of Bonn, with this special mention, that: ". . by his enlightening experiments, he had been among the foremost to contribute acquaintance with the history of generation of the lower organisms and had greatly advanced the science of fermentation."

When the war of 1870 came, Pasteur, a hemiplegic invalid, sought refuge at Arbois.

As soon as he heard of the bombardment of the Normal School and the Museum, by the barbarians, the 18th of January, 1871, Pasteur hastened to return his diploma to the dean of the faculty of medicine of the Rhenish university, with this stinging letter:

"To-day the sight of this parchment in odious to me, and it is offensive to me to see my name, with the qualification of VIRUM CLARISSIMUM, with which you decorate it, placed under the auspices of a name damned henceforth to the execration of my country, that of REX GULIELMUS.

"Since the interview of Ferrières, France has fought to main tain respect for human dignity; and Prussia has fought to achieve the triumph of the most abominable of lies, namely, that the future peace of Germany must be bought at the price of the

dismemberment of France, while every sensible person knows that THE CONQUEST OF ALSACE AND LORRAINE IS THE STAKE OF A LIMITLESS WAR.

"Written at Arbois (Jura) after reading the stigma of infamy inscribed upon the forehead of your king by the illustrious director of the Museum of Natural History, M. Chevreul."

Soon after that, Pasteur received this answer from the dean of the faculty of medicine of the University of Bonn, Dr. Maurice Naumann: "Monsieur, the undersigned is directed to answer the insult you have dared to offer to the German nation and to the person of its august emperor, King William of Prussia, and to address to you the expression of *his utmost contempt.*

"With the purpose of shielding its acts *against pollution,* the faculty returns to you, herewith, your defamatory message."

Pasteur's retort was soon forthcoming:

"Sir Dean, the expression of contempt, from the mouth of Prussian subjects, is equivalent, for a heart truly French, to that of VIRUM CLARISSIMUM that you bestowed upon me not long ago, giving the motives for it, in one of your public acts. You talk to me of pollution, Sir Dean. It is, you may be sure, and it will continue to be, even to the most remote future, for the memory of those who began the bombardmen of Paris when capitulation because of famine was inevitable and who have continued that savagery when it had become evident to everybody that it would not hasten by one single hour the surrender of the heroic city."

That's all the use Pasteur ever made of his Bosch title of Doctor of Medicine; he showed himself the worthy son of the Sergeant in the wars of Spain and of the Campaign of France, decorated, at the age of 23, by the Legion of Honor, the 12th of March, 1814, at Bar-sur-Aube.

Every chance for approach to or from the Bosches was henceforth dissipated: "Each one of my works, even to the end of my days," Pasteur wrote to his pupil, Raulin, "shall bear, as its epigraph: HATRED FOR PRUSSIA: VENGEANCE, VENGEANCE."

It is somewhat here, 'now—that Nemesis so long awaited.

Dr. CALLAMAND(of St. Mande).

Editorial

> Excellent workers in science; tenacious and short-sighted academicians, each wrapped in his specialty! Benedictines of the laboratory who experimented painstakingly and occasionally hit upon something, in spite of enormous blunders given out as truths, because they were their own . . . that was all! And side by side with such patient laboriosity, really worthy of respect—what charlatanism! What great names exploited as a shop sample! How many sages turned into proprietors of sanatoriums! . . . A Herr Professor discovers the cure of tuberculosis, and the tubercular keeps on dying as before. Another labels with a number the invincible remedy for the most unconfessable of diseases, and the genital scourge continues afflicting the world. And all these errors were representing great fortunes, each saving panacea bringing into existence an industrial corporation selling its products at high prices—as though suffering were a privilege of the rich. How different from the bluff Pasteur and other clever men of the inferior races who have given their discoveries to the world without stooping to form monopolies!
>
> VINCENT BLASCO IBANEZ.
>
> *The Four Horsemen of the Apocalypse.*

✢ ✢ ✢

High Praise for Base Hospital 33.

When the history of Albany's Base Hospital is written the name of Sir William Osler will have a prominent place. The assistance he gave in the recovery of the stray equipment has already been recorded, and his participation in the ceremony of flag-raising gave prompt evidence of his sympathy and encouragement. The only regret is that his remarks on that occasion were not preserved. His own students may accept his cooperation as the expression of his affection for Hopkins men, but Albany physicians will assume a broader sentiment of friendship for a city which he frequently honored, and the advancement of whose medical institutions he was always ready to promote. Either view, however, contributes to the broader conception of Dr. Osler's humanity which grasps every opportunity to benefit his fellows.

It is coming to be known, that, in addition to his semi-official

relations with the unit, Dr. Osler has shown many personal attentions to its members, and has done much to add to the comfort of their stay in England. He modestly justifies this approval of their work, and is not sparing of praise. His friends here may well be gratified at his unqualified commendations, expressed in a personal letter as follows:

"Elting made things hum, at first; and Corning has been an unqualified success as his successor. The clinical and pathological laboratory was one of the very best I have ever seen, and the x-ray outfit was extraordinarily good."

The war is ended and the Albany Unit is being gradually dissipated to the four winds. Its record is now one of history, in which its promoters and administrators will have lasting pride. It is fitting that its career should close with the stamp of success imprinted by the highest medical authority of "Greater Britain," under circumstances in which, to paraphrase his own words, "the American may forget Yorktown; the Englishman, Bunker Hill, and the Frenchman, both Louisbourg and Quebec, on the battlefields of France."

Public Health

Edited by Arthur Sautter, M. D.

Department of Public Safety, Bureau of Health, Albany, N. Y.

Compiled by William F. Fullgraff, Registrar.

Bureau of Vital Statistics.

Deaths for the Month of December, 1918.

Consumption	13	Bright's Disease	16
Typhoid Fever	1	Apoplexy	15
Scarlet Fever	0	Cancer	13
Measles	0	Accidents and Violence	16
Whooping Cough	0	Deaths under 1 year	11
Grippe	31	Deaths over 70 years	47
Diarrheal Diseases	3	Death rate	20.40
Pneumonia	9	Death rate less non-residents	18.41
Broncho Pneumonia	10		

Deaths in Institutions.

	Non. res.	Res.		Non. res.	Res.
Albany Hospital	4	19	St. Peter's Hospital ...	0	13
Albany Hospital Camp.	0	2	Alms House	0	3
St. Margaret's House ..	2	0	Old Ladies' Home	0	1
Home for Aged	1	1			
Homeopathic Hospital .	8	4		20	51
Hospital for Incurables.	3	3			
Public Places	1	2	Births		172
Maternity Hospital	1	3	Still Births		5

Division of Communicable Disease.

Typhoid Fever	9	Tuberculosis	23
Scarlet Fever	1	Pneumonia	56
Diphtheria and Croup	4	Mumps	11
Chickenpox	16	Influenza	436
Smallpox	0	Septic Sore Throat	17
German Measles	0		
Measles	1	Total	589
Whooping-cough	15		

Number of days quarantine for scarlet fever:
Longest..... 34 Shortest..... 34 Average 34
Number of days quarantine for diphtheria:
Longest..... 137 Shortest..... 18 Average.....56 1/6
Fumigations:
Rooms..... 188 Buildings..... 25
Milk bottles disinfected 177

Communicable Disease in Relation to Schools.

None.

Nurse's Report.

Tuberculosis.

Living cases on record December 1, 1918.....		887
Cases reported:		
By card	19	
Dead cases by certificate	4	23
		910
Dead cases previously reported.....	9	
Dead cases not previously reported.....	4	
Removed	4	17
Living cases on record January 1, 1919.....		893

Total tuberculosis death certificates	13
Non-resident deaths	0
Resident deaths	13
Visits to cases of tuberculosis	62
Miscellaneous visits	12

Laboratory Report.

Diphtheria.

Initial Positive	9	Unsatisfactory	11
Initial Negative	234		
Release Positive	4	Total	300
Release Negative	42		

Sputum for Tuberculosis.

Positive	36		
Negative	146	Total	186
Doubtful	4		

Widals.

Positive	4		
Negative	4	Total	11
Unsatisfactory	3		

Miscellaneous.

Wassermann tests	80	Pathological Examinations	3
Milk analyses	100	Miscellaneous	1

Division of Sanitation.

Complaints	48	Reinspections	31
Inspections	44	Plumbing	7
Plumbing	2	Sanitary	24
Sanitary	42		

Hearings.

Hearings	0

Division of Plumbing, Drainage and Ventilation.

Inspections	66	Blue or red	6
Old Houses	59	Peppermint	1
New Houses	7	Houses examined	22
Permits issued	60	Re-examined	62
Plumbing	59	Valid	18
Building	1	Without cause	4
Houses tested	7		

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	13	Cats removed	63
Dogs removed	46		
		Total	122

DIVISION OF MARKETS AND MILK.

Public market inspections	22	Fat tests	52
Milk depots inspected	24	Sediment tests	34
Stores inspected	65	Chemical tests	52
Milk cans inspected	369	Cows examined	85
Dairies inspected	10	Cows quarantined	3
Milk houses inspected	10	Complaints investigated	6
Lactometer readings	86	Special investigations	6
Temperature readings	86	Poultry condemned .... lbs.	12

MISCELLANEOUS.

Cards posted for communicable disease	6	Vaccination dressings	67
Cards removed	8	Employment certificates issued to children	29
Notices served on schools	65	Garbage collected from 1st District	204
Notices served on stores and factories	5	Garbage collected from 2d District	177
Postal card returns sent to doctors	6	Garbage collected from 3d District	211
Postal card returns received from doctors	8	Cases assigned to health physicians	51
Inspections and reinspections	6	Calls made	112
Vaccinations	42		

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR DECEMBER, 1918.—Number of new cases during month, 161; classified as follows: Dispensary patients receiving home care, 2; district cases reported by health physicians, charity cases reported by other physicians, 52; moderate income patients, 46; metropolitan patients, 63; old cases still under treatment, 86; total number of cases under nursing care during month, 247. Classifications of diseases for the new cases: Medical, 101; surgical, 10; gynecological, 0; obstetrical under professional care, 53; mothers, 35; infants, 35; pre-natal, 18; eye and ear, 18; skin, 4; throat and nose, 53; dental, 0; infectious diseases in the medical list, 68; infectious diseases in the surgical list, 0. Disposition: Removed to hospitals, 5; deaths, 7; discharged cured, 53; discharged improved, 40; discharged unimproved, 7; number of patients still remaining under care, 49.

Special Obstetrical Department.—Number of obstetricians in charge of

cases, 2; number of students in attendance, 0; number of nurses in attendance, 1; number of patients carried over from last month, 0; number of new patients during month, 0; number of patients discharged, 0; number of visits by head obstetrician, 0; number of visits by the attending obstetrician, 0; number of visitis by students, 0; number of visits by nurses, 0; total number of visits for this department, 3 cases.

Visits of Nurses (all departments).—Number of visits with nursing treatment, 604; for professional supervision of convalescents, 130; total number of visits, 1,049; cases reported to the Guild by health physicians, and other physicians, 38 graduate nurses, 18 pupil nurses on duty. Reported by: Family, 33; neighbors, 10; home service, 7; ass'd char., 1; dispensary, 2.

Dispensary Report.—Number of clinics held, 70; number of new patients, 99; number of old patients, 371; total number of patients treated during month, 470. Classification of clinics held: Surgical, 6—22 patients; nose and throat, 9—44 patients; eye and ear, 17—197 patients; skin and genito-urinary, 7—49 patients; medical, 7—48 patients; lung, 7—33 patients; dental, 1—4 patients; nervous, 3—18 patients; stomach, 0; children, 8—32 patients; gynecological, 7—9 patients.

The Medical Review of Reviews, which has recently purchased the *Buffalo Medical Journal,* and which was consolidated with their publication in January, announces the purchase of *The Southern Practitioner,* which will also be consolidated with the *Review* next month. This is the fourth Journal which the *Medical Review of Reviews* has purchased and consolidated under its present management.

For Better Rural Health.—Much remains to be done in rural districts, according to the annual report of the Secretary of Agriculture, to control such pests as mosquitoes and the hookworm, to eliminate the sources of typhoid fever, and, even more, to give the country districts the advantage of modern hospitals, nursing and specialized medical practice.

Noting that many agencies, some of them private enterprises with large funds, are working for improvement, the report says that the Department of Agriculture, through its home demonstration service, is giving valuable aid, and the public health service is increasingly extending its functions.

To what extent the further projection of effort is a matter for State or local action remains to be determined, but it seems clear that there should be no cessation of activities until there has been completed in every rural community of the Union an effective sanitary service and, through the provision of adequate machinery, steps taken to control and eliminate the sources of disease and to provide the necessary modern medical and dental facilities, easily accessible to the mass of the people.

Improving City Milk Supplies.—Sanitary milk control, an important factor in city welfare and a big problem of the city health department, receives personal attention from the Dairy Division of the United States Department of Agriculture. Specialists in sanitary production and handling of milk are usually available, and upon request of the city health departments they are sent to assist in improving the milk supply. This assistance may mean the making of a general survey lasting only a few days or a very intensive inspection lasting two or three months.

During the last year personal aid was given to thirty-six cities in fourteen States. In addition to this, assistance was given the United States Public Health Service by conducting sanitary milk surveys and in improving the milk supply of fifteen extra cantonment zones.

All phases of city milk supply are covered. Inspection of dairies, milk, plants, and other distributing centers are made; samples of the products are taken and analyzed both chemically and bacteriologically. When necessary, help is given in the installation of laboratories and technique and in the interpretation of the results of chemical and bacterial analyses.

Special meetings may be held among both producers and consumers of milk in order to arouse interest in the local milk supply. Advice in framing ordinances to cover dairy and milk conditions is also offered.

An important feature is the milk contest work, in which specialists assist in instituting these contests and act as judges in scoring the product to determine the relative standing of milk producers. These contests encourage rivalry among dairymen and, in consequence, tend to improve the milk supply of a city.

A Program for Mental Hygiene.—Any program of the United States Public Health Service for Mental Hygiene should take into consideration:

A—The most effective means by which the several government agencies can operate in studies and investigations of mental hygiene.

B—The problems of better care and treatment of the insane and mental defective.

C—Measures for the prevention of mental disorders

The results of the studies and investigations already made by the Public Health Service indicate the desirability of continuing the activities of the service on a broader scale as outlined in the following program:

A—Cooperation with Other Government Agencies.

1. In addition to the duties prescribed by law as related to the mental (a) to establish a school for the training of medical officers as mental hygienists, (b) to provide facilities for training nurses and assistants for duty in mental hygiene work, and (c) to investigate the care and treatment of insane aliens, confined under immigration laws in public and private institutions at Government expense.

2. Cooperation with other bureaus of the Treasury Department in the mental examination of coastwise pilots, locomotive engineers and train dispatchers as a safeguard to the traveling public.

3. Cooperation with other departments or bureaus of the Government to devise practical methods for the mental examination of civil employees of the Government with a view to determine their fitness for different occupations.

4. Cooperation with the Department of Interior in the study and prevention of insanity and mental deficiency among the wards of the Government, such as the Indians, Esquimaux and other primitive races for whom the Government is responsible.

5. Cooperation with the Bureau of Education in the revision of educational methods from the standpoint of mental hygiene.

6. Cooperation with the Bureau of Education in devising practical plans for the establishment of special classes for the training of feebleminded and delinquent children.

7. Cooperation with State Departments of Justice and other agencies to secure (a) the adoption of a model law providing for the early treatment of mental disorders, (b) the enactment of a uniform commitment law, and (c) the establishment of psychiatric pavilions in general hospitals.

8. Cooperation with Federal and State Departments of Justice to secure the establishment of psychiatric clinics in connection with the courts to determine the mental status of criminals, dependents and delinquents appearing before the court.

B—Care and Treatment.

1. Studies and investigations of methods of administration, maintenance, medical care, classification and after-treatment of the insane, epileptic, feebleminded, criminal and dependent confined in institutions.

2. Investigations with a view to devising a desirable method of parole of the insane and feebleminded, criminal and delinquent classes.

C—Prevention.

1. Cooperation with State and local agencies to secure the adoption of a law making mental disorders reportable to the health department.

2. Reviewing and publishing State laws of commitment of the insane and feebleminded.

3. Cooperation with the State and other agencies to determine the prevalence of the insane, feebleminded, alcoholics and epileptics.

4. Investigating the prevalence and the care and treatment of the insane, epileptic, feebleminded, criminal and dependent classes confined in institutions in Alaska and in the insular possessions.

5. Compiling a national reference index of the literature on mental hygiene.

6. Investigating mental status in relation to certain constitutional diseases and drug addiction.

7. Cooperation with the industrial hygiene unit of the U. S. Public Health Service in the studies and investigations of the mental status of

workmen as related to output, fitness for the job, protection from health and injury hazards, and permanence of employment.

8. Cooperation with the child hygiene unit of the service in the study and investigation of insanity in children and of the personality of the potentially insane.

9. Cooperation with the Division of Venereal Diseases in studies and investigations of the mental status of prostitutes and of the relation of venereal diseases to mental disorders.

Cold-Pack Canning and Botulism.—The United States Department of Agriculture authorizes the following statement:

Botulism, often called sausage poisoning, is a specific intoxication brought about by *Bacillus botulinus,* an organism isolated by Van Ermengen from insufficiently cooked sausages which had caused a severe outbreak of food poisoning in Belgium in 1895. The symptoms (nausea, gastric pains, visual disturbances, muscular weakness, etc.) are caused by a definite toxin or poison produced by the *Bacillus botulinus* outside of the body.

The *Bacillus botulinus* is an anaerobic organism—that is, it grows in the absence of air. It grows readily at 20 to 25 degrees centigrade, but only sparingly at 37 degrees centigrade, the temperature of the body, and there is no conclusive evidence that it produces its toxin to any extent in the digestive tract of animals. *Bacillus botulinus* does grow readily and produces its toxin in protein foods such as meat or fish products. Some investigators state that it also produces its toxin readily in protein-containing vegetables like peas, beans and corn. When growing in these foods, the organism produces a very powerful poison which produces the symptoms mentioned above, or even death, when eaten in extremely small amounts. Fortunately, cases of botulism are not common in this country.

The *Bacillus botulinus* is a spore-forming organism, but both the organism and its spores are not very resistant to heat, the spores being killed by heating to 80 degrees centigrade for one hour. The toxin which the organism produces is also destroyed by boiling. Thorough cooking at the boiling temperature is therefore all that is necessary to kill the organism and destroy its toxin in the food, and cases of botulism are due to the eating of food which has been infected with the organism and not been sufficiently cooked. Sausages, which might become infected with this organism, present ideal conditions for its growth, and have been a frequent cause of botulism. From this fact the name of the disease is derived. Infected meat products and, in a few instances, canned vegetables and fruits have been given as causes of botulism.

Recently Dr. Dickson of San Francisco has reported* a study of eleven outbreaks of food poisoning, occurring during the past eighteen years in California, which he attributes to eating canned vegetables and fruits. In these cases no definite information is available as to the methods used in canning the vegetables, but it is reasonable to assume that the contami-

nation of the goods might have been brought about by the selection of food of poor quality for canning, by lack of cleanliness in packing the products by the neglect of some essential steps in the process, or by failure of the heat to penetrate to all parts of the can in sterilization.

There is no danger that the type of food poisoning known as "Botulism" will result from eating fruits or vegetables which have been canned by any of the methods recommended by the United States Department of Agriculture, providing that such directions have been followed carefully, and that no canned goods are eaten which show signs of spoilage. In case of any doubt as to whether the contents of a particular can have spoiled it should be thrown away. If fed to chickens or other animals it should be boiled. No canned food of any kind which shows any signs of spoilage should ever be eaten. In the cold-pack method of canning given out by the Department of Agriculture, only fresh vegetables are recommended for canning, and sterilization is accomplished by the following processes: Cleansing, blanching, cold-dipping, packing in clean, hot jars, adding boiling water, sealing immediately, and then sterilizing the sealed jars at a minimum temperature of 212 degrees Fahrenheit for one to four hours, according to the character of the material. Since the spores of *Bacillus botulinus* are killed by heating for one hour at 175 degrees Fahrenheit there is no reason to believe that the *botulinus* organism will survive such treatment.

The *Bacillus botulinus* has been found in the digestive tracts of some animals, especially the pig and the fowl, probably occurring there in the same manner as does the organism of tetanus (lock-jaw) in the intestinal tract of the horse. It is not a parasite in the ordinary sense, but rather a saprophyte. From these sources it may be deposited on the soil although attempts at isolating it from the soil have generally given negative results.

PERSONAL.—Dr. MEYER L. RHEIN (A. M. C., '80), figures prominently in Dr. Arthur N. Davis' timely book, "The Kaiser as I Knew Him," and has become, unwittingly, the agent of an analysis of the Kaiser's character of world-wide interest. Dr. Davis explains the accident of his intimacy with the Kaiser as follows:

"During my first vacation while at college I went to New York to get more practical experience in dentistry, and became assistant to Dr. M. L. Rhein; it was through this connection that the opportunity to practice abroad subsequently came to me.

"I graduated from college in 1902 and established myself in Chicago. About a year and a half later I received an invitation from Dr. Rhein to go to New York to meet Dr. Alonzo H. Sylvester, an American dentist practicing in Berlin, who numbered the Kaiser among his patients. He had come to America to select an associate because his failing health made it impossible for him to give to his practice the attention it demanded."

DIED.—Dr. CHARLES B. TEFFT (A. M. C., '64), of Utica, N. Y., died October 31, 1918.

—Dr. FRANK TOWNSEND STANNARD (A. M. C., '88), of Troy, N. Y., died October 29, 1918.

—Dr. WILLIAM F. RAFFERTY (A. M. C., '11), died at his home in Rensselaer, N. Y., January 15, 1919.

—Dr. WESLEY M. ADAMS (A. M. C., '13), of Schenevus, N. Y., died October 15, 1918.

—Dr. ISAAC H. LENT (A. M. C., '13), of Middletown, N. Y., died about October 20, 1918.

—★Dr. MATTHEW OLSTEIN (A. M. C., '16), of Peekskill, N. Y., died of wounds on October 1, 1918. Dr. Olstein, ranking as lieutenant, was one of the officers attached to the 314th Infantry, to which he had been transferred from the Upton Division. He was twenty-four years of age, and before entering the service was a member of the staffs of the Metropolitan and Lying-in Hospitals of New York City.

Current Medical Literature

MEDICINE

Post-Malarial Severe Anaemia.

A. W. HARRINGTON, Captain, R. A. M. C. (T. F.), and W. WHITELAW, Ch. B., Captain, R. A. M. C. (T. F.). *Glasgow Medical Journal,* No. 51. June, 1918.

Shortly after our arrival in Macedonia we were impressed by the occurrence after malaria of cases of grave anaemia, apparently of the pernicious type. It was found possible to examine eighty cases, involving one hundred and twenty-one full blood counts, and complete physical examinations.

With the exception of a few Bulgar and German prisoners, the patients were all Serbian soldiers. For the differential results, five hundred cells were counted.

I. *Severe forms.*—1. Post-malarial anaemia may assume a grave type characterized by all the signs and symptoms of pernicious anaemia but without evidence of oral or intestinal sepsis.

2. The spleen is enlarged, sometimes considerably so, but the liver is seldom enlarged.

3. The blood shows marked diminution of red corpuscles, high color index, leucopaenia with a relative increase of lymphocytes and to a lesser extent of large mononuclears, poikilocytosis, megalocytosis, polychromasia, occasional granular basophilia, the presence of megaloblasts and

normoblasts, and a small percentage of myelocytes frequently, and myeloblasts constantly.

4. Such cases occur most frequently as a sequel of subtertian malaria, but may follow benign tertian.

5. Recovery usually follows prompt and energetic treatment, but death may occur, and the gravity of the prognosis increases with the age of the patient.

6. Treatment by arsenic used as in pernicious anaemia, either as liquor arsenicalis in increasing doses, or galyl or kharsivan intravenously, usually leads to recovery. It should be combined with treatment by quinine, orally or intramuscularly as indicated.

II. *Mild forms.*—1. The blood shows a less marked diminution of red corpuscles, a low color index except in a few more recent cases, a less marked leucopaenia with a relative increase of lymphocytes, and large mononuclear cells, slight poikilocytosis, occasional megalocytes and polychromasia, rarely granular basophilia, the presence of normoblasts and rarely of megaloblasts, and a small percentage of myelocytes frequently, and of myeloblasts constantly.

2. The average age of the patients is lower.

3. Recovery is the rule.

A Study of the Neutralization Properties of Antipoliomyelitic Horse Serum.

John W. Nuzum. *Journal of Infectious Diseases, Vol. 23, No. 3, September*, 1918.

Antipoliomyelitic horse serum, prepared by repeated intravenous injections of the coccus isolated from the central nervous system in human and monkey poliomyelitis possesses neutralizing properties against the virus of poliomyelitis.

Immune horse serum protected 11 monkeys perfectly against fatal doses of virus. In 2 monkeys in which both immune human serum and immune horse serum failed to neutralize the virus, a definite delay of 16 days in the onset of paralysis must be attributed to the immune horse serum as compared to a shorter delay of 11 days with immune human serum known to possess much neutralizing principles.

The neutralizing properties of antipoliomyelitic horse serum in vitro for the virus of poliomyelitis afford a convenient and satisfactory test of the potency of this serum for use in the treatment of poliomyelitis. Suitable controls with normal horse serum and comparisons with immune human serum known to possess neutralizing properties should be conducted simultaneously.

Finally, the neutralizing, protective and curative properties of antipoliomyelitic horse serum for experimental poliomyelitis of monkeys are in direct accord with the favorable results observed in the serum treatment of human poliomyelitis and argue strongly for the etiologic relationship of the coccus to this disease.

The New Treatment for Paralysis Agitans.

WALTER B. SWIFT. *Boston Medical and Surgical Journal, Vol. CLXXIX, No. 21, page 644, November 21, 1918.*

The author cites briefly the treatment of three typical cases of a method which consists solely in the muscular movements of a simple nature, gone through very slowly, at the rate of about one foot to the second, with strong mental concentration upon the movement while it is in progress. First come movements of the right foot, then of the left, then of the legs successively, then of the right and left arms in order, then of both arms, and finally of the hands and fingers. The object is not muscular development but rather development of nervous control over the muscles. The movements should be regular and they should be definitely prescribed, but it is not necessary to outline any special form for them in this place because they can easily be invented by anyone. No particular value need be attached to any special set of exercises, because the nervous control is the same in one as in another.

It seems likely that the essence of the entire treatment lies in this slowness of movement, and perhaps also in the mental concentration which should accompany the movement.

The purpose of these exercises is to develop just this feeling of pervading steadiness to such a pitch that it endures as a constant feature of the patient's physical life. By the writer's experience with them and by observation of patient's use of them he is led to believe that these exercises do build up a *central inhibitory control.*

A Clinical Report of Nonspecific Protein Therapy in the Treatment of Arthritis.

SNYDER. *Archives of Internal Medicine, August,* 1918.

In his series of 110 cases, the author used typhoid vaccine prepared by the laboratories of the New York Board of Health, indicating however that any protein (bacterial, animal or vegetable) may be used.

In acute arthritis about sixty per cent of cases responded by an abrupt termination after one injection (intravenously). After repeated injections in subacute cases marked improvement followed in about fifty per cent and moderate improvement in another twenty-five per cent. While in chronic cases (one to ten years' duration) "moderate improvement in mobility of some joints was noted in almost all cases."

Experimental Meningococcus Meningitis.

CHARLES R. AUSTRIAN. *Bulletin of the Johns Hopkins Hospital, Volume XXIX, No. 330.*

Owing to the circumstances under which research was carried out monkeys were not available. Rabbits were used. Cultures of meningo-

cocci which were introduced into the spinal canal in the lumbo sacral region produced a rapidly fatal inflammatory reaction most marked at the base of the brain. In certain instances, positive cultures were obtained from the nasal mucous membrane. In only two of ten animals did invasion of the blood stream occur.

In a new series of twenty rabbits, suspension of meningococci were injected into the nasal mucous membrane. None of these animals developed meningitis. Two developed positive blood cultures. This may have been due to the direct injection into the small blood vessel.

In another series of fifteen rabbits similar suspension was injected into the ear vein. Meningococci disappeared from peripheral circulation within an hour and a quarter and none of the animals developed meningitis.

However, hyperemia of the choroid plexus and of the meningeal vessels was produced by preliminary irritation of the meninges produced by injections of normal rabbit serum and from thirty to fifty minutes later the animal was given an injection of standard suspension of the meningococci into the ear vein. In two animals of twenty so treated, killed one hour after injection, meningococcus was found in smears and was obtained from the spinal canal, in one, in pure culture. Three other animals developed typical fatal meningitis.

From the above, the author believes it is demonstrated that meningococcal sepsis in the rabbit may lead to the development of a metastatic meningitis when there is a pre-existent hyperemia of the meninges.

Peptic Ulcer with Special Reference to Roentgen-Ray Diagnosis.

F. H. Baetjer and Julius Friedenwald. *Bulletin of The Johns Hopkins Hospital Volume XXIX,* No. 330.

An additional series of 743 cases of peptic ulcer has been followed not only clinically but by careful X-ray study. In 185 cases, the diagnosis was definitely proven by operation. In 323, clinical symptoms as well as positive X-ray indicated that the diagnosis was undoubtedly correct. 235 cases lacked some immediate signs although in a large number the X-ray findings were definite.

From this study the authors conclude:

"1. The X-ray offers most valuable assistance to the diagnosis of peptic ulcer, and although this method is not yet sufficiently well developed to be relied upon alone without entering into the clinical aspects of the disease, it is of the greatest diagnostic help in obscure cases.

"Positive X-ray findings are noted in about 84 per cent of cases of peptic ulcers and in 79 per cent of cases operated upon.

"2. In duodenal ulcer there is excessive hypermotility of the stomach with rapid evacuation of the contents, so that the greater portion is extruded within the first half hour; there is hypermotility of the duodenum

with formation, usually, of a deformity which remains fixed in all of the examinations.

"3. The diagnosis of gastric ulcer is dependent upon two conditions, namely, the functioning of the stomach, and the finding of the filling defect. It is only when the filling defect is situated along the anterior surface of the stomach and along the anterior surface of the lesser and greater curvatures that it can be demonstrated. On the other hand, it matters not what the situation of the ulcer is, the functions of the stomach are materially affected. We have in this condition an excessive irritation from the ulcer, with consequent hypermotility and a spastic condition of the pylorus, so that for the time being there is practically no expulsion of bismuth. It is only when the spasticity relaxes that a portion of the bismuth is expelled. In gastric ulcer, wherever its situation, we can always look for a certain amount of retention of contents. There is always a more or less marked hour-glass formation. According to our observations the functional signs are often as important as the presence of the filling defect in arriving at definite conclusions, inasmuch as in 8 per cent of our cases, although there were no defects found, the functional changes pointed definitely to ulcer.

"4. The greatest difficulties arise in the diagnosis of complicated cases; that is, when adhesions are present. These so frequently mask the usual findings that it is often impossible to determine whether there is really an ulcer of the stomach at hand or a lesion of some other organ. When the ulcer is situated at or near the pylorus, signs of partial obstruction frequently aid in establishing the diagnosis.

"5. The X-ray affords an almost absolute means of differentiating between gastric and duodenal ulcer.

"6. By means of the X-ray examination we can generally rule out the presence of ulcer.

"7. We can approximately determine the degree of healing as well as recurrence of an ulcer which cannot be as certainly determined in any other way.

"8. One can obtain sufficient evidence as to the extent and induration of the ulcer and degree of obstruction to guide us, in a measure, as to the necessity of surgical intervention."

A Clinical Study of 400 Patients with Bronchial Asthma.

I. C. WALKER. *Boston Medical and Surgical Journal, August 29, 1918.*

All patients were tested by the skin or cutaneous method for sensitization to the proteins of animal hair or dandruff, food, bacteria and pollens. 48% gave a positive skin test, the criterion for a positive test being an urticarial wheal measuring at least 0.5 cm. "75% of the patients who began to have asthma during infancy (under the age of two) were sensitive; between the ages of 2 and 15, 66% were positive; be-

tween the ages of 15 and 35, 52% were positive; between the ages of 35 and 50, 23% were sensitive; and none were sensitive when the age of onset was after 50."

Walker shows that sensitization to the protein in animal hair (horse, dog, cat, wool), was most marked under 10 years of age (45 out of 75 sensitive cases) and that succeeding ages show a gradual decrease in number thus sensitive.

Sensitization to food proteins apparently is much more common in infants. Of all food cases one-half were sensitive to cereals, wheat being the chief offender; next to wheat ranks the egg, while fish, potato and casein are close thirds.

In the case of pollen proteins timothy and ragwood hold chief place among the early and late pollens, respectively; while, in the author's findings, sensitization to rose, red top, daisy and golden rod was infrequent.

All ages up to 40 showed about the same frequency of sensitization to bacterial proteins, more being sensitive to Staph. pyog. aureus.

As to treatment, the author says: "If a patient is sensitive to food proteins, such food should be omitted from the patient's diet for at least a month. In this series of cases nearly all such patients have been relieved of asthma. Attempts to desensitize the patient against offending food protein by the subcutaneous injection of or by feeding gradually increasing amounts of the protein have failed. We have reasons for believing that total abstinence from the offending protein for a long interval automatically desensitizes the patient for that protein.

"Patients who are sensitive to bacterial proteins may be successfully desensitized against such by treatment with vaccines of those organisms.

"Patients who are sensitive to pollen proteins should be treated in anticipation of the season."

The Clinical Significance of the Abnormally Wide Ventricular Deviation in the Electrocardiogram.

S. Neuhof. *Archives of Internal Medicine, July,* 1918.

The author has noticed in cases of myocardial disease (hypertension, aortitis, precordial distress, decompensation) that electrocardiographic tracings show an abnormal width of deviation of the R wave of the ventricular complex. Taking 0.07 of a second as the lower limit of abnormal he shows that all of his tracings with abnormally wide R was presented unmistakable signs of myocarditis. "It had no relation to the height of the R wave, pulse rapidity, cardiac rhythm or to the underlying disease producing the myocarditis. In some of the cases severe decom-

pensation was present; in others, absent. Though no definite statement of the fundamental cause of the abnormally long duration of the R phase can be offered; its frequent association with myocarditis would make it appear possible that this lesion acted as a direct hindrance to the proper, normal, rapid prolongation of the wave of electrical excitation through the ventricular musculature."

Studies on Renal Function During and Immediately Following Some of the Acute Infectious Diseases.

FROTHINGHAM. *Archives of Internal Medicine, July,* 1918.

Cases selected for this study were among young people who presented no urinary evidence of chronic or acute nephritis. The series included six cases of typhoid fever all on high caloric diet, four cases of pneumonia Group I (Cole), six cases of pneumonia Group IV (Cole), five cases of acute articular rheumatism and six miscellaneous cases (diphtheria, gonorrhoeal arthritis, periosteal abscess, acute gout.)

Renal function was studied during and just after the infection by (*a*) phenolsulphonepthalein test, (*b*) the estimation of blood urea (*c*) and the determination of McLean's index of urea excretion.

The author concludes: "From these studies it may be concluded that these tests for renal function, namely, the phenolsulphonephthalein elimination, the urea nitrogen in the blood, and the index of urea elimination, failed to show consistent evidence of impaired renal function during the course of or following these acute infections in which the clinical picture or the urinary examination by the older methods showed nothing suggestive of acute nephritis."

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Edited by Frances K. Ray

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Babinski, J. Hysteria or pithiatism . . . in the neurology of war. 1918. (Military medical manuals.)

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Bourgeois, H. War otitis. 1918. (Military medical manuals.)

Brend, W. A. Health and the state. 1917.

Broadhurst, Jean. Home and community hygiene. 1918.
Broca, August. After-effects of wounds of bones and joints; tr. by J. R. White. 1918. (Military medical manuals.).
Chandler, A. C. Animal parasites and human disease. 1918.
Church, J. R. The doctor's part—what happens to the wounded in war. 1918.
Courtois-Suffit, M. Abnormal forms of tetanus. 1918. (Military medical manuals.)
Crocker, A. A. Modern dentistry for the laity. . . . 1918.
Cushny, A. R. Textbook of pharmacology and therapeutics. 1918.
Delano, J. A. American Red Cross textbook on home hygiene. 1918.
Davis, M. M. & Warner, A. R. Dispensaries; their management and development. 1918.
Duke, W. W. Oral sepsis in its relationship to systemic disease. 1918.
Dunton, W. R. Occupation therapy; a manual for nurses. 1915.
Exner, M. J. Rational sex life for men. 1918.
Fantham, H. B., Stephens J. W. & Theobald, T. V. Animal parasites of man. 1916.
Farlow, J. W. History of Boston medical library. 1918.
Frink, H. W. Morbid fears and compulsions. 1918.
Galloway, T. W. Biology of sex for parents and teachers. 1913.
Graves, W. P. Gynecology; 2d ed. 1918.
Gray, Henry. Gray's anatomy revised by W. H. Lewis. 20th ed. 1918.
Gt. Brit. Central control board (Liquor traffic). Alcohol: its action on the human organism. 1918.
Harris, L. I. & Schwartz, Nelle. Cost of clean clothes. n. d.
Heitzmann, Louis. Urine analysis . . . 2d ed. 1906.
Hess, J. H. Principles and practice of infant feeding. 1918.
Hiss, P. H. & Zinsser, Hans. Textbook of bacteriology. 4th ed. 1918.
Howard, Russell. Surgical nursing and the principles of surgery for nurses; 3d ed. 1917.
Kaplan, D. M. Serology of nervous and mental diseases. 1914.
Lagrange, Felix. Fractures of the orbit. 1918. (Military medical manuals.)
Lay, W. Man's unconscious conflict. 1918.
Leo-Wolf, C. G. Nursing in diseases of children. 1918.
Leriche, R. Treatment of fractures. 1918. (Military medical manuals.) 2v.
McCollum, E. V. Newer knowledge of nutrition: use of foods for preservation of vitality and health. 1918.
Mackenzie, W. C. Action of muscles, including muscle rest and muscle re-education. 1918.
MacLeod, J. J. R. Physiology and bio-chemistry in modern medicine. 1918.
MacNeal, W. J. Pathogenic micro-organisms. 1914.

Mallory, F. B. & Wright, J. H. Pathologic technic. 7th ed. 1918.
Mansfield, William. Histology of medicinal plants. 1916.
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Muldoon, H. C. Lessons in pharmaceutical Latin and prescription writing and interpretation. 1916.
National league of nursing education. Standard curriculum for schools of nursing, prepared by the Committee on education. [1918.]
Neurological clinics: exercises in the diagnosis of diseases of the nervous system, given at the Neurological inst., New York, by the staff of the first division. Edited by Joseph Collins. 1918.
Norris, G. W. & Landis, H. R. M. Diseases of the chest and principles of physical diagnosis. 1917.
North, C. E. Farmers' clean milk book. 1918.
Oliver, George. Studies in blood pressure. 3d ed. 1916.
Penhallow, D. P. Military surgery. 1918.
Prescott, A. B. & Johnson, O. C. Qualitative chemical analysis; 7th ed., rev. by J. C. Olsen. 1916.
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Royal college of veterinary surgeons, London. Register. 1914.
Smith, A. E. Studies in the anatomy and surgery of the nose and ear. 1918.
Smith, E. J. Maternity and child welfare. 1915.
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Vincent, H. & Muralet, L. Dysentery, Asiatic cholera and exanthematic typhus. 1917. (Military medical manuals.)
Vincent, H. Typhoid fever and paratyphoid fevers. 1917. (Military medical manuals.)
Watt, H. J. Psychology of sound. 1917.
Wenyon, C. M. Human intestinal protozea in the Near East. 1917.
White, W. A. Mechanisms of character formation. . . . 1916.
Wilbur, W. H. Koehler method of physical drill. 1918.
Willoughby, W. G. & Cassidy, Lewis. Anti-malarial work in Macedonia. 1918.
Winton, A. L. Course in food analysis. 1917.
Wrightson, Thomas. Inquiry into the analytical mechanism of the internal ear. 1918.
Youngken, H. W. Pharmaceutical botany. 1918.

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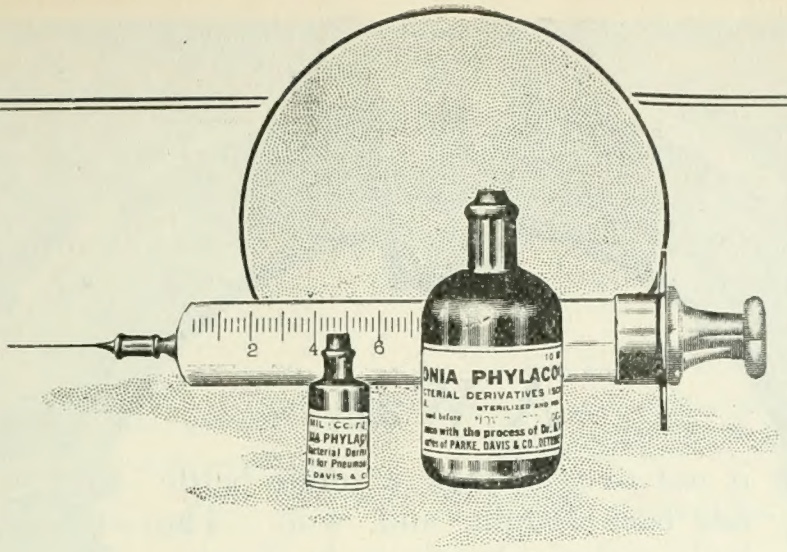
Dementia praecox studies; a journal of psychiatry of adolescence.
Journal of general physiology; published by the Rockefeller Institute for medical research.



The Phylacogen Treatment of Pneumonia

BECAUSE of its frequency and high mortality pneumonia is rightly regarded as one of the most serious diseases with which the medical profession has to contend.

It is said upon good authority that approximately ten per cent. of all deaths in the United States during recent years have resulted from pneumonic infection.

These facts suggest this question: Is it justifiable to adopt "expectant treatment" when a product of specific character is available?

Experience leads to the conviction that almost every case of pneumonia seen within twenty-four hours after the initial chill will terminate in recovery if perseveringly treated with **Pneumonia Phylacogen.**

To obtain the best possible results **Pneumonia Phylacogen** should be employed in the early stage of the disease. Its administration even in mild cases is earnestly recommended, as by its use the duration of the disease may be curtailed and grave developments prevented.

Bio. 605. Bulbs of 10 mils, one in a package.
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NOTE —Attention is directed to the new Phylacogen Syringe pictured above. This is an ideal instrument for the administration of Pneumonia Phylacogen. It is fully described in our catalogue.

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